

Bright ideas for smart energy

JANUARY 09, 2013 12:00 AM

University students are teaching Montana valuable lessons about spending money wisely and efficiently.

The Smart Building Initiative of student governments at Montana State University and the University of Montana calls for the entire University System to adopt energy-saving, high-performance building standards for all new construction and major renovations.

UM and MSU student body presidents gave updates on the initiative to the Board of Regents in May, and again in November. In the course of their study, the students learned that the Montana Legislature in 2009 already directed that all state agencies set high-performance building standards.

However, that directive has yet to be fulfilled. As reported last week by in The Missoulian and The Billings Gazette, the state Department of Administration recently hired a consultant to lead the process of developing building standards. The process has been slow, according to the state engineering division, because no money was appropriated to implement the Legislature's directive.

Much is at stake. The state owns around 4,500 buildings and structures with about 31 million square feet. Nearly two-thirds of the space belongs to the Montana University System.

The system's two flagship campuses in Bozeman and Missoula spend more than \$12 million annually on utility bills, including natural gas and electricity. The 14 other in-state colleges and universities spend millions more.

"If we can control part of those energy costs, we can control one part of the cost of education," UM Provost Perry J. Brown told The Missoulian. "It's good for the state and it's good for the students."

Student leaders are expected to ask the 2013 Legislature to consider reinvesting any energy savings back into projects to achieve additional savings.

We agree with Brown that, "the Montana University System can take a lead on pushing these standards forward."

In fact, UM has already started using Leadership in Energy and Environmental Design standards to guide new construction and retrofits. Upgrades in facilities made since 2009 are yielding \$420,000 annual in utility savings, according to Tom Javins, UM's associate director of engineering.

In a report to regents, student leaders said they intend for energy-efficiency upgrades to be self-sustaining over time. The projects will focus on equipment and personnel, student, faculty and staff engagement, accounting procedures and how to retain the savings within

the University System.

Other energy-efficiency projects have been undertaken at other campuses. Building in efficiency has been standard practice at Montana State University-Billings for years.

But consider the potential benefits of consistently applying high conservation standards to every major state project. Let's not waste any more time or money. Energy efficiency is an investment that keeps returning benefits every time lights are turned on or the heating, ventilation or air condition is running. The university students have the right idea with their Smart Building Initiative.

— The Billings Gazette

Smart Buildings Initiative – Rep. Zach Brown (HD 63)

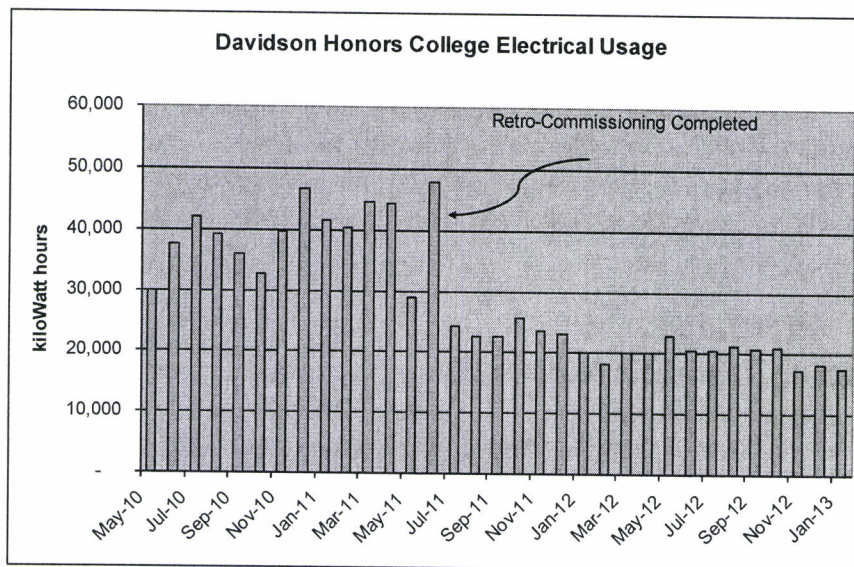
HB 464- State Admin 2/16/15

"AN ACT PROVIDING FOR THE DEVELOPMENT OF HIGH-PERFORMANCE BUILDING STANDARDS AND CREATING THE HIGH-PERFORMANCE COMPLIANCE PROGRAM FOR EXISTING BUILDINGS WITHIN STATE AGENCIES AND THE MONTANA UNIVERSITY SYSTEM; PROVIDING FOR TRANSFER OF UTILITY FUNDS"

Jist: Similar to SB 49 passed in 2009, this bill is intended to motivate state agencies to minimize utility costs by opting in to energy efficient upgrades. This bill, however, addresses basic operations and maintenance costs, unlike SB 49 which focused on larger renovations and new state buildings. Monetary savings due to such upgrades would be placed in a separate agency account to be used for further energy efficient upgrades. This will reduce government waste with *no increased cost to the taxpayer*.

Impact

- This bill creates an **incentive for state agencies to reduce their utility costs**, and it provides them with a means to enhance and accelerate these cost-saving measures. Nothing in this bill would require significant investment by the state, nor does it mandate agency participation in the high performance certification program created. This is simply one option for reducing wasteful public sector spending, and it will create another financing option for agencies looking to invest in efficiency projects.
- *This bill effectively incentivizes the reduction of spending over time by removing utility budgets from the "if you don't spend you lose it" paradigm.*



Retro Commissioning Project

Cost: \$33,000

Monthly Cost before: \$3,500

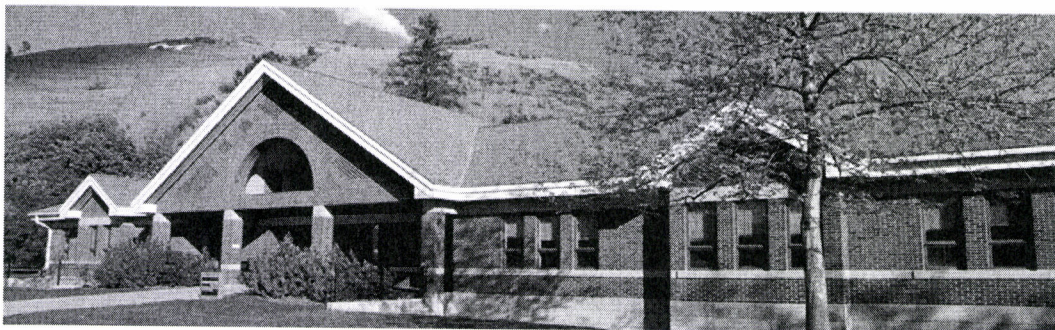
Monthly Cost after: \$1,800

Monthly Savings: \$1,700,

48% reduction

Annual Savings: \$20,400

Simple Payback: 1.6 years



Background

Each biennium, the State of Montana invests a significant amount of money in utility budgets for state agencies. Much of that money is spent on utilities in buildings that are old and energy-inefficient. Despite significant opportunities for cost-saving measures to be taken by state agencies, public budgeting encourages the full expenditure of allocated utility funds so that they are not lost in the next biennium. In an effort to save dollars inefficiently allocated to utilities in existing state buildings, this bill provides incentives for state agencies to reduce their utility consumption and invest in energy efficiency projects in existing buildings.

Content

There are two main components to this bill.

- Creation of a high performance building standard (HPBS) for existing state buildings.
 - Such a standard is in the process of adoption for new building projects.
 - Standard will be created by a working group of state agencies and the Montana University System.
 - Agencies opting into the HPBS will create an operational plan to cut their energy consumption and measure energy savings. This plan and savings will be certified by the DOA & DEQ.
 - Agencies may opt in to this program for individual buildings if they deem it economically viable. This is not a mandate.
- Creation of special revenue accounts
 - For agencies participating in the certification program, separate accounts will be created into which utility savings may be transferred.
 - Funds in these separate accounts will specifically allocated towards future utility saving projects.
 - This will allow for accelerated deferred maintenance investments, thereby improving building efficiency and comfort at a greater pace.
 - This serves as an incentive for state agencies to reduce utility spending because savings are no longer lost to the general fund.

**Please vote yes for HB 464 for more effective use of taxpayer dollars
and more efficient government spending.**